

IN THE CLAIMS

1-15. (Withdrawn and Cancelled)

16. (Currently Amended) A diamond tool having a shank and a plurality of abrasives attached thereto, wherein a plurality of concave portions are formed in a surface of the shank and [[a]] a first portion of the plurality of abrasives are bonded into the concave portions to form a first abrasive layer, and wherein another a second portion of the plurality of abrasives are formed over the first portion of the plurality of abrasives bonded into the concave portions and onto the a top surface of the shank to form a second abrasive layer overlying the first abrasive layer, thereby forming multiple abrasive layers.

17. (Original) The diamond tool as claimed in claim 16, wherein the concave portion includes a dimple type one and a groove type one.

18. (Original) The diamond tool as claimed in claim 17, wherein a cross section of the concave portion taken along a direction perpendicular to the surface of the shank includes a semicircular shape, a semi-elliptic shape, a U-shape, a V-shape, or a wavy shape.

19. (Original) The diamond tool as claimed in claim 16, wherein a wall between the concave portions has a rounded upper end edge.

20. (Original) The diamond tool as claimed in claim 16, wherein the concave portion includes a through-hole type concave portion.

21. (Currently amended) The diamond tool as claimed in claim 16, wherein a groove is formed in a main cutting face of the shank and a through hole is formed in a sub-cutting face of the shank; and the plurality of abrasives are bonded into the groove and the through hole the plurality of concave portion comprises a groove-type concave portion formed in a main cutting face of the shank, and a through-hole type concave portion formed in a sub-cutting face of the shank.

22. (Original) The diamond tool as claimed in claim 16, wherein a ratio (s/w) of the spacing (s) between the concave portions to the width (w) of the concave portion is within a range of 0.2 to 0.8.

23. (Previously presented) The diamond tool as claimed in claim 16, wherein a ratio (w/a) of the width (w) of the concave portion to the maximum diameter (a) of the abrasive is greater than 0.25.

24. (Original) The diamond tool as claimed in claim 16, wherein a ratio (d/a) of the depth (d) of the concave portion to the maximum diameter (a) of the abrasive is greater than 0.25.

25. (Cancelled)

26. (Currently amended) The diamond tool as claimed in claim 25-16, wherein ~~the protruding a height of the second portion of the plurality of abrasives bonded to the top of the concave portion and the surface of the shank~~ is varied.

27. (Cancelled)

28. (Original) The diamond tool as claimed in claim 16, wherein the diamond tool includes a saw, a core drill, a cutter, a saw blade, a wire saw, a polishing cup, a profiler, an end mill, a straight wheel, an ID wheel, a rotary dresser, and an edge grinding wheel.

29. (Currently amended) The diamond tool as claimed in claim 16, wherein the abrasive includes synthetic and natural diamond, cubic boron nitride (cBN), ~~silicene~~ silicon carbide, alumina, and a mixture of at least two thereof.

30. (Currently amended) A tool having a shank, wherein a plurality of concave portions are formed in a surface of the shank, the tool further comprising:
a lower abrasive layer formed in the concave portions; and
an upper abrasive layer formed over the lower abrasive layer and over ~~the a~~ the a top surface of the shank.

31. (Currently amended) The tool as claimed in claim 30, wherein a top of the upper abrasive layer formed over the top surface of the shank is protruded above a top of the lower abrasive layer.

32. (Currently amended) The tool as claimed in claim 30, wherein a top of the upper abrasive layer formed over the top surface of the shank is lower higher than a top of the lower abrasive layer.

33. (New) The tool as claimed in claim 16, wherein the second portion of the plurality of abrasives are formed on a topmost surface of the shank.

34. (New) The tool as claimed in claim 33, wherein the topmost surface of the shank is disposed between one of the plurality of concave portions and another one of the plurality of concave portions adjacent to the one of the plurality of concave portions.

35. (New) The tool as claimed in claim 30, wherein the upper abrasive layer is formed over a topmost surface of the shank.

36. (New) The tool as claimed in claim 35, wherein the topmost surface of the shank is disposed between one of the plurality of concave portions and another one of the plurality of concave portions adjacent to the one of the plurality of concave portions.

37. (New) The tool as claimed in claim 16, wherein the top surface of the shank is disposed between one of the plurality of concave portions and another one of the plurality of concave portions adjacent to the one of the plurality of concave portions.